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ABSTRACT

This paper reviews significant events and resources that have emerged since the 1992 publication of "Adult Literacy Education: Current and Future Directions. An Update" by Hanna Fingeret. It analyzes major milestones in research and practice in literacy education that have occurred in the last decade. The paper begins by looking at the current context for doing research, including the legislative influences of the Welfare Reform Act and the Workforce Investment Act. Next, the monograph explores major aspects of the infrastructure that support the field, related to policy, assessment and accountability, and professional development. The next section summarizes and analyzes the state of the field with regard to the following areas of teaching and learning: adult learning and development; instructional strategies; learner engagement; special populations; trauma; reading, writing, and numeracy; teaching for the General Educational Development Test; family literacy; work force literacy; health literacy; and technology. The document concludes with reflections on the ways in which these milestones challenge the development of the field of adult literacy education. Contains 196 references. (SK)

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Opportunities and Limits: An Update on Adult Literacy Education

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Information Series No. 391

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Opportunities and Limits:
An Update on Adult Literacy Education

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Foreword

The Center on Education and Training for Employment would like to thank the authors for their work in the preparation of this paper.

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Introduction

For more than 10 years Fingeret's ***Adult Literacy Education: Current and Future Directions. An Update*** has served both as a valuable resource and as a professional compass to many practitioners and researchers in the field. Published in 1992, it was written with a great sense of optimism. Fingeret identified the 1991 National Literacy Act (NLA), the first major revision of the federal legislation that funds adult basic education (ABE) in many years, as having the potential to alter service provision, professional development, assessment and evaluation, and research at a fundamental level. For the first time, she observed, federal legislation was written to build long-term infrastructure for the field after operating in "temporary crisis" mode throughout the 20th century (Quigley 1997). Fingeret assessed the legislation—and the climate it helped build—as an opportunity to expand the field, and she specifically identified many ways in which it was opening up. For example, state and regional resource centers and the National Institute for Literacy (NIFL) were making greater resources available to support practitioners and improve practice. At the same time, a stronger emphasis on women and families, nonnative speakers, the under- or unemployed, and homeless and prison populations appeared to imply greater scope and depth for literacy education. Learners were also coming to the fore, with learner perspectives more likely than ever to influence research, student voices frequently expressed in publications, and students more often invited to participate in making important choices about their learning, program structures, and operations.

Most of the issues Fingeret identified from the literature over 10 years ago are still relevant today. Unfortunately, some of them no longer play much part in day-to-day conversations about the purposes and processes of adult literacy education. We hope that this volume will help to refocus attention on what we still see as pressing challenges, serve as an updated resource, and offer some insights on the next steps toward adults using literacy in ways that are effective, efficient, and—perhaps most important—meaningful in their lives. Over the last 10 years, research has progressed in a number of areas related to reading, writing, and math, though it remains somewhat piecemeal and incoherent. Classroom practice is varied, but with little sense of what is actually best for which learners, under what circumstances. Meanwhile, Fingeret's calls for leadership development and strengthening of the adult literacy work force 10 years ago are nearly as pressing today as they were when the previous update was written.

A New Context for Adult Basic Education

As we write this monograph, the context for ABE has changed dramatically. The legacy of the 1991 National Literacy Act is clear in a number of ways including the establishment of professional development systems in many states (Belzer, Drennon, and Smith 2001), an explosion of Internet-based resources for learners and teachers, and the establishment of federally funded research centers. Over the same period, two further federal policies have had a major impact on the field, shifting much of the discourse at the research, policy, and practice levels (Belzer 2003) in ways that run counter to Fingeret's hopes. In 1996 the Personal Responsibility and Work Opportunity Reconciliation Act, commonly known as the Welfare Reform Act, was enacted. In 1998 the Workforce Investment Act (WIA) was passed by Congress; reauthorization is expected in 2004, with only some minor changes. With WIA, adult literacy funding at the federal level was subsumed by work force development legislation after many years of "stand-alone" funding.

Welfare reform was not intended to have an impact on adult basic education. However, its emphasis on "work first" (a philosophy that assumes that work of any sort is preferable to receiving welfare benefits and that employment, rather than education, should be the first step toward economic self-sufficiency), mandatory work requirements for those receiving cash benefits, and lifetime limits on benefits dramatically changed the student body in many ABE programs. According to a study on how federal

policy influences practice (Belzer 2003), some programs experienced rapid drops in enrollment as welfare clients were forced to go to work; others saw a change in the learner population with increased representation of students they considered hardest to serve—those with the lowest skills, greatest disabilities, addictions, and other obstacles to improving their economic and personal outlooks. Programs reported an increase in nonvoluntary students. Many programs began to shift their curriculum by emphasizing job search and retention skills. Although some programs saw this shift as positive because it gave them and their students a greater sense of focus, others saw the change as detracting from what they saw as their mission—personal development, learner empowerment, and the facilitation of adults meeting their goals (ibid.). Some practitioners felt pressed into the role of monitoring their students' attendance and progress for an outside entity (the welfare system) that did not always share their goals and purposes (Sparks 2001).

The first part of WIA (Title I) is an effort to reform the work force development system by streamlining services, eliminating redundancy, and increasing customer satisfaction and program quality through improved accountability. The structure of Title II of the statute, which provides federal funds for adult basic and family literacy education, is consistent with these goals. The legislation implied a fundamental philosophical shift by placing educational funding within a work force development law, made all the more explicit by requiring ABE to partner with local "one-stop" work force development centers. One of the most visible changes, from the perspective of practitioners, is the mandate to create a performance accountability system compatible with the National Reporting System (NRS), which requires all states to report uniform outcome data to the federal government. In other words, the progress of individual learners in local programs will now ultimately be known in Washington (albeit in aggregate form). Whether practitioners and programs view this change as positive or not (and the response is varied), most believe that an increased emphasis on the systematic documentation of learner outcomes has altered program structures and classroom routines in significant ways (Belzer 2003).

These changes have not been demonstrated to improve practice or better support learner outcomes. Yet from our perspective they have had the effect of making the world of practice contract in significant ways. A spirit of social justice and hope for structural change has for the most part been replaced by a sense of hunkering down to comply with accountability demands. At the same time federal funding agencies are asking the field to respond to demands for "evidence-based practice," a requirement shared with K-12 education. These changes have the potential to limit the ability of programs to support learner-centered and participatory practice, decreasing opportunities to respond to learners' goals or encourage them to reach self-identified goals at the personal, family, and community levels. Although alternative assessment and evaluation strategies being promoted in the early 1990s had the potential to shape instruction in ways that expanded notions of reading, writing, and literacy, the current system's dependence on standardized tests of limited scope encourages teachers and programs to focus on a narrower set of academic and functional skills.

Institutionalization of Adult Literacy Education

Looking back over the last decade, one of the most striking outcomes of the policy shifts is the increased institutionalization that has occurred, a shift we see as contributing to the contraction of the field. For many decades literacy had not been much noticed by educational or state mechanisms, other than during cyclical "literacy crises" (Quigley 1997), but now it has started to be recognized as an integrated component of the broader educational system. Influenced by welfare reform and the enactment of WIA, as well as a general shift toward greater focus on outcomes accountability in many sectors of human services (Grubb et al. 1999), there has been a great deal more attention focused on adult literacy education and the

opportunity costs of funding its provision since the mid-1990s. Federal funding has started to flow toward certain types of adult education programs in a much more targeted way, and the freedom to set priorities and design innovative approaches is constrained at state and local levels by federal expectations.

Along with institutionalization has come systematization, by which we mean many processes have become formalized into a system. A professional credentialing system, currently being implemented in some states, is a significant example of this. In previous decades literacy instructors were hired based on their experience and interest, but in more and more states instructors are required to attain credentials of some sort. On the one hand, this move potentially improves the quality of the work force. On the other, it can exclude skilled and motivated instructors, because in many states credentialing costs money and, more important, time. Thus, only people with the resources for credentialing have the opportunity to be instructors. There is little evidence that this more systematic approach to staffing actually increases the quality of instruction or learning, but it does represent a way in which institutionalizing the system limits the freedom of programs and contracts the potentialities in this field.

In many of the topics we review in this document the effects of institutionalization are clear. The topic of learning disabilities, for example, makes sense only to the extent that there is an expected, standard rate of progress—without such an expectation people learning at different paces is a normal phenomenon. Indeed, the principles of adult education, which call on educators to work with learners where they are and allow their interests, experiences, and abilities to lead, challenge the fundamental utility of learning disability as a category. Similarly, institutionalization tends to support such practices as credentialing, which are seen as providing a broadly accepted assurance of quality in instruction. A noninstitutionalized field would tend to value local experience and local knowledge above a formal credential.

We do not want to argue that institutionalization is necessarily a bad thing. We do assert, however, that it is considerably more complex and ambiguous than is often acknowledged, and can contain unanticipated negative consequences. The Workforce Investment Act of 1998 offers many exciting opportunities for adult literacy education, such as funding longevity, making careers in adult literacy possible for more practitioners, and the opportunity to establish adult literacy as a respected and effective component of educational provision. Yet WIA also put the National Reporting System into motion, a hugely complicated and standardizing mechanism making reporting a necessary part of the instructor's day. The time spent keeping statistics is time taken away from instruction. Whether this is for better or worse for learners is unknown (Belzer 2003), but it clearly shifts the focus.

And what of principles such as social justice and social change? We are afraid that in our experience, now more than ever, there is little time or opportunity left for such considerations. For example, it is difficult to show that helping learners write a letter to their Congressional representatives on the need for child care is directly related to increasing that individual's employability. State programs are usually explicitly prevented from lobbying activities, making it unwise for practitioners to encourage family literacy participants to use literacy as a medium to press for better public transportation, for example. Thus, many practitioners may feel discouraged from engaging in activities aimed at altering the status quo as they could have a negative impact on outcome data or program funding. The same argument applies to many other activities that are important components of progressive literacy practice.

We want to make clear that some important initiatives have been undertaken that do not necessarily create a contraction of the field even though they support institutionalization and systematicity. Among these is the National Institute for Literacy's Equipped for the Future (EFF n.d.) and the document ***From the Margins to the Mainstream*** (National Literacy Summit

2000 Steering Committee 2000). Both of these initiatives are responses to National Education Goal 6, to eliminate adult illiteracy by the year 2000 (National Education Goals Panel 1994). EFF has attempted to define more clearly what this means in terms of what adults need to know and be able to do; ***From the Margins*** is an action plan to refocus the field, given that the goal of eliminating adult illiteracy was not achieved within the specified timeframe.

EFF is an effort to improve the quality of instruction and the outcomes of participation. It grew out of a response to concerns that the adult basic education system did not have clearly defined objectives, assessments, and accurate data, which made evaluating overall program quality difficult. EFF's standards-based system of reform was designed to address these problems by providing clear goals and objectives that could guide instruction and assessment. The aim was to develop a "Content Framework and Standards." The process began by surveying adult learners about what they believe they need to know and be able to do in the areas of reading, writing, and math while fulfilling responsibilities in the range of adult roles—as workers, family members, and citizens. These were categorized into four areas of skills and knowledge—communication, working with others, problem solving and decision making, and learning to learn. Content standards were developed and validated, a range of training and support services were made available to the field, and assessment procedures are under development (Ananda 2000). However, EFF faces significant challenges in integrating its assessment tools with the requirements of the NRS, two processes for assessing learner outcomes that may be philosophically and practically incompatible. EFF may also face defunding as NIFL shifts to a broader focus on literacy across the lifespan. It is discouraging that the reauthorization of WIA emphasizes standards-based reform, but does not acknowledge the comprehensive efforts of countless practitioners, learners, and researchers who have worked to make the ideas of EFF concrete in practice.

Based on a felt need in the field to articulate goals for the future to replace National Education Goal 6, ***From the Margins to the Mainstream*** (National Literacy Summit 2000 Steering Committee 2000) is a document that grew out of a summit meeting of 150 leaders convened to articulate a focus for adult literacy education in the 21st century. The 2000 summit and subsequently produced document were viewed as a way of building consensus around an action plan for the field. Participants at the summit discussed a previously produced position paper, a draft document was developed to reflect the discussions there, and the final version was redrafted in response to feedback from the practitioner community.

The goal articulated in the final document is that "[b]y 2010, a system of high-quality adult literacy, language, and lifelong learning services will help adults in every community make measurable gains toward achieving their goals as family members, workers, citizens, and lifelong learners" (ibid., p. 1). Three key priorities for reaching this goal are "a system of quality services for adult students, ease of access to these services, and sufficient resources to support quality and access" (p. 3). Several issues are named as cutting across all three priorities—student involvement, communications, partnerships, technology, poverty, and racism. Family and workplace literacy programs, English for speakers of other languages, learning disabilities, corrections, and older adults are all named as programs and populations that are "of major importance" (p. 3).

Formed in 1998, the student leadership organization VALUE (Voice for Adult Literacy United for Education) is another important initiative that has the potential to push back against a contraction in the field. VALUE's mission is to "expand the role of adult learners in adult literacy efforts in the United States" (VALUE 2001). Of particular relevance here, the mission statement identifies reforming education as one of the five primary roles of learner leaders. VALUE followed up on this by building the organization, conducting leadership training, and getting involved in various policy-oriented

activities such as the National Coalition for Literacy and the National Literacy Summit. VALUE leaders often participate in discussions on literacy-related listservs. Through these kinds of efforts, learner leaders can help keep learners' goals and expectations on the table in discussions about the direction of the field. They can serve as important advocates for learners' rights and excellence in service provision. However, it is absolutely critical that all levels of the field start with the assumption that learner voices are an integral part of building and strengthening the adult literacy system. Otherwise, learners' perspectives will be drowned out in the push to institutionalize the field.

There are many practitioners, administrators, and bureaucrats who care deeply about learners and have a strong commitment to improving the world through their work. EFF and ***From the Margins to the Mainstream*** seem congruent with such commitments; VALUE demonstrates learners' commitments to ensuring that these efforts are congruent with the needs of the users of the system. However, dwindling funding, increasing demands for accountability related to a limited range of learner outcomes, and more prescriptive practices seem likely to diminish the possibilities for innovative practices that are truly responsive to both learners *and* funders.

The challenge, as we see it, is to respond positively to demands for more accountability and better outcomes while still maintaining a focus on what learners want to learn and on what practitioners have to teach. Our times demand that practitioners, researchers, policymakers, and learners continue to seek and create opportunities to learn that treat adults as adults, are congruent with what has been demonstrated to be best practice—in the broadest sense of the term, not just that circumscribed by the "gold standard" of evidence-based research (Belzer and St. Clair, under review)—and truly have the potential to make our world more just and equitable.

Purpose of This Monograph

It is not possible to write a review of a decade's work in adult literacy education, as we have set out to do here, without taking a position on it. Otherwise, the product would be a recounting of events and resources that adds little beyond a chronological review. We have reflected a great deal on our position in writing this review, a perspective grounded in what we would characterize as a "pedagogy of hope" (Freire and Macedo 1987). We believe that adult literacy education is an important venue for adults to build better communities at both the micro and macro levels through reflection, critique, and action. This can be done through learning more about reading and writing the word, as well as the world (Freire 1983). In the final analysis we do not accept that literacy is simply about acquiring a set of neutral technical skills (Street 1984), and we agree with Freire (1970) that neither literacy nor education is neutral. It should either help to change people's lives in ways they choose or help them to work within the status quo on an informed basis. In other words, literacy can serve personal, social, and instrumental purposes. Our position on the value of literacy is consistent with that expressed in 1992 by Hanna Fingeret, author of the last adult literacy update published by the ERIC Clearinghouse on Adult, Career, and Vocational Education.

We enter this discussion with optimism for the future and appreciation of the stability offered by increasing institutionalization, but also with skepticism toward the notion that systematization is necessarily a healthy development in every situation. As we review significant events and resources of the last decade, we take the opportunity to interrogate them to discover whether they offer new insights or simply limit choice. Meanwhile, we attempt to avoid knee-jerk negativism toward the limits of systematization. Limits are helpful when they outline effective and efficient practice, but destructive when instituted without good cause. We view our role in writing this review as assessing events as well as reporting them. Our hope is that this

approach makes the document valuable to our readers and supportive of diversity and justice as the hallmarks of good practice.

With that goal in mind, we have organized the next sections into analyses of the major milestones in research and practice that have occurred since the last update was completed. We begin by looking at the current context for doing research. Next, we explore major aspects of the infrastructure that support the field—research and practice related to policy, assessment and accountability, and professional development. We do this through the lens of research that has been done in these areas. The next section is devoted to summarizing and analyzing the state of the field with regard to various areas of teaching and learning. We selected our topics for this section by identifying dominant trends and areas of emphasis in major outlets for reporting on research on adult basic education including academic journals, the two federally funded research centers—the National Center on Adult Literacy (NCAL) and the National Center for the Study of Adult Learning and Literacy (NCSALL), and the ERIC database. We conclude this document with our thoughts on the ways in which these milestones challenge the field of adult literacy to keep growing, developing, and asking complex and difficult questions. Only through this process can we continue the struggle for a hopeful pedagogy.

A Note on Terminology

Throughout this document we use the phrases "adult literacy education" and "adult basic *education" interchangeably. Many would* argue that they are not, in fact, interchangeable; the choice of phrases has been contested many times. However, it is not clear to us that making a distinction contributes to the clarity of our discussion. Both phrases should be taken to refer to the same activity—the provision of instruction in reading, writing, numeracy, and other skills currently considered fundamental in North American society to individuals over the age of 18. Specifically, this includes beginning and intermediate reading, writing, and numeracy, pre-GED and GED (General Educational Development) preparation, and Adult Secondary Education (ASE) offered in a wide range of contexts such as community-based organizations, work force development programs and workplaces, family literacy programs, and prisons. Although the teaching of English as a second language is an area of literacy work growing in size and significance, ESL instruction is not specifically the focus of our discussion here and is not treated as a separate topic. Documents that serve a similar synthesizing purpose focusing specifically on ESL are now available (Van Duzer and Florez 2003; Van Duzer, Peyton, and Comings 1998).

Research Practices
in Adult Basic Education

Research Practices

Through much of the last decade, funding for research in adult literacy education expanded. For the first time, a federally funded adult literacy research center was initiated through the Office of Educational Research and Improvement. The National Center on Adult Literacy was funded for 5 years. A competitive renewal process moved the funding to the National Center for the Study of Adult Learning and Literacy, a collaboration between Harvard University Graduate School of Education and the nonprofit education and development organization, World Education. These two research centers funded many studies, and both have had the goal of collaboration with and dissemination to the field. Their research agendas have been broad and eclectic, but overall they have focused on a range of policy and practice issues with potentially broad impact on the field (although no empirical research has investigated the impact these two research centers have had on practice). In addition, the National Institute for Literacy funded special research fellowships for several years during the 1990s.

Several important grants were made to the field by foundations. Perhaps most notably, a significant project was funded by the Wallace/Reader's Digest Funds to address the very pragmatic and direct question, "What works?" The project aimed to demonstrate that strong assessment practices, including effective data collection and analysis, as well as formats for reporting learner outcomes, can help practitioners improve programs while responding to accountability requirements. The findings from this project were derived from input from and interaction with staff from 12 exemplary programs. The findings and implications were not reported in a typical research style. Rather, the end product of this work is a resource guide for program managers (see http://www.wwlp.org/resources2.htm). Meanwhile, academic researchers in universities not affiliated with the research centers and practitioners in programs have contributed to the knowledge base in significant ways—as the references section of this publication attests.

Much of the work that has been most visible to the field has been qualitative and descriptive or conceptual. The number of quantitative studies is so small, in fact, that when a panel was convened to develop a set of research-based principles for reading instruction (Kruidenier 2000a), they found only 70 studies met their criteria of high-quality experimental design. On the one hand, this lack of data about reading instruction derived from experimental design type studies indicates a serious gap in what we can know about adult reading development and instruction using this type of research. It also reflects limited funding for large-scale research and the difficulty of completing randomized field studies with the adult literacy population (Greenberg, in preparation). On the other hand, it may also indicate that the field gravitates toward more descriptive and qualitative types of research for practical and philosophical reasons.

Fingeret's (1992) anticipated expansion of possibilities for research has come to pass thanks, in part, to the federal funding of two national research centers. However, we are currently in an era in which opportunities to conduct research studies that draw on a wide range of questions and methods are becoming limited by both statute and policy. Qualitative or interpretive research assumes that new knowledge can be revealed through careful descriptions of contexts intended to uncover the multiple perspectives and experiences of stakeholders or participants. But with the No Child Left Behind Act of 2001 providing a blueprint for all educational legislation (including the reauthorization of Title II of the Workforce Investment Act), research is defined as that which addresses questions using experimental design, randomized field studies, and quantitative rather than qualitative data. Federal legislation now deems research valuable only if it is "scientifically based," and practice is expected to be based on the evidence of this type of research.

Many educational researchers have offered critiques of the Bush Administration's focus on one research paradigm nearly to the exclusion of all others. For example, the idea of scientifically based research in education is modeled on research in medicine and other sciences. Although the administration puts this type of research at the pinnacle of knowledge generation, others argue that science is not so much about certainty as it is about uncertainty (Berliner 2002; Erickson and Gutierrez 2002) and that scientists cannot always make a clear distinction between science and nonscience (Cunningham 2001). An even clearer critique of the emphasis on a scientifically based medical model is that "minds are not the same as bodies" (Gardner 2002 cited in NCTM Research Advisory Committee 2003, p. 186). Experimental research designs can be used effectively to answer some important questions about what works. However, "'what works?' does not get us very far in improving the learning opportunities of students and does not go very far toward explaining why some children have historically been 'left behind' by the educational system" (Cochran-Smith 2002, p. 189).

There are features of adult basic and literacy education that make the limiting of what counts as valid research particularly problematic. For example, the contexts (community-based organizations, school-based programs, workplace programs), purposes and goals (to increase economic well-being at the individual and/or society levels, to improve self-esteem, to complete school credentials, to help improve the school performance of children, to work for change in the community), learners (e.g., race, gender, ethnicity, age, employment status, previous learning experiences), and instructors (e.g., varying amounts of training and experience, varying employment status) cover a broad spectrum of available resources and opportunities, as well as challenges and needs. Even the concept of literacy is a diverse and evolving construct. "The overall effect of these layers of diversity...is to make generalization of statistically derived results difficult to justify" (Belzer and St. Clair, under review).

A second problem with applying one research approach across every situation rests in the ways practitioners use research. Many practitioners bring rich resources to their practice in the form of previous experiences teaching in other contexts or other work experiences, build their practice on K-12 educational training, and develop their skills through careful observation of their work with learners. Yet, studies indicate that practitioners seek research as a further resource in improving their practice. They seek research that is clear, practical, and resonant with what they know about learners and classrooms (Practitioner Dissemination and Research Network 1998). Research indicates that practitioners draw on research as a resource, as "a way to think about the everyday classroom world and hopefully make it better." (Belzer and St. Clair, under review). In other words, practitioners use research pragmatically in ways that they can apply to their specific needs as practitioners, their working contexts, and the needs of their learners. This use of research does not fit well with the goal of experimental methods that aim to create generalizable findings—practitioners use research in quite the opposite way. They are far more concerned with the particular than the general.

A third problem is the current state of the knowledge base in adult basic and literacy education. The knowledge base is far too narrow at this point to limit the field's opportunities to learn more about learners, learning and how to improve practice. For example, the previously mentioned ***Research-Based Principles for Adult Basic Education Reading Instruction*** (Kruidenier 2002a) raised more questions than it answered, many of which can be addressed only by using descriptive research methods. A significant number of principles derived from the synthesis of research that met the panel's criteria for consideration focused on "alphabetics." Yet, they did nothing to explain how phonetic knowledge is used by adult readers, what barriers they face in using it, under what conditions learners acquire the concept, or how alphabetics function in relationship to other aspects of reading (Belzer and St. Clair, under review). Although qualitative research address-

ing itself to these questions has yet to be undertaken, the current climate for researchers makes it unlikely that such work will be undertaken at any time soon.

Research completed since Fingeret (1992) wrote ***Adult Literacy: Current and Future Directions***, much of which is synthesized in later sections, has been largely qualitative, perhaps in response to the kinds of questions that practitioners and researchers find most compelling and necessary to address. It is not possible to prove that every finding is generalizable, yet the concepts and ideas they assert as well as their implications for instruction are powerful and helpful in practice. They answer questions, for example, about what learners bring to the table and in what ways these resources can and should influence learning. Experimental research, although offering important insights and guidance for practice, could not have generated this knowledge.

The Infrastructure of the Field

Infrastructure

Infrastructure in adult basic education, as we define it here, is made up of the numerous organizational and individual supports that make program management and instruction possible. Often invisible in day-to-day practice, it plays an important role in setting the stage for the work that teachers and tutors do with learners. In this section, we investigate three legs of the adult basic education infrastructure—policy, assessment and accountability, and professional development—in terms of what they demonstrate about the limits and contractions of the field. The topics covered here are not inclusive, but rather are reflective of the major trends in empirical and conceptual research in the field. Clearly, funding and related legislative policy are a key element here. However, so much of this is shaped by federal legislation already discussed that we leave this topic for further discussion elsewhere (e.g., Belzer 2003).

Policy

Policy-related research generally has two main thrusts. First is research that evaluates the implementation or impact of major, significant national initiatives. These are usually in the form of evaluations and have focused, for example, on Even Start Family Literacy (St. Pierre et al. 1998), the Section 353 set-aside for teacher training and innovation (Mackin et al. 1996), and more generally adult basic education (General Accounting Office 1995). Currently, several evaluations of the Workforce Investment Act are underway, focusing on various aspects of implementation.

A second strand of policy-related research is less empirical and more conceptual and synthetic in nature. This type of research tends to outline the broad context for policy implementation and the many areas of research that are needed and would be useful in informing policy development. Researchers argue that a greater body of knowledge about areas such as effectiveness, efficiency, and innovation (Venezky et al. 1996) are particularly pressing given the scant (and potentially decreasing) dollars dedicated to adult basic education.

Despite Fingeret's optimism that the 1991 NLA had the potential to finally build real infrastructure in the field, researchers suggest that it has remained weak (Merrifield 1998), making it difficult to innovate or even produce and transmit new knowledge (Beder 1996). This is due in part to multiple funding streams that are not well coordinated and often require programs to respond to multiple funding applications, accountability demands, and reporting requirements that tax personnel beyond their capacity (Koloski 1993). Even more fundamentally, different funders have differing definitions of literacy and inconsistent goals for adult literacy education. Another symptom of a weak infrastructure is a largely part-time work force, estimated at 80% of the total (Beder 1996). Part-time status does not imply ineffective or uncommitted instructors, but it does mean extremely limited time for professional development. The fact that the field is underresourced also has detrimental implications for professional development (Beder 1996; Belzer et al. 2001; NCSALL 2002). A further implication of the weak infrastructure in the field is the difficulty of implementing structural change and reform. For example, performance-based assessment, which has greater potential to measure the effectiveness of instruction with regard to content standards than do standardized tests (Stites et al. 1995), is very difficult to use in the current ABE context due to the complexity of administering and interpreting this type of assessment (Kruidenier 2002b).

Multiple knowledge gaps and practice dilemmas are identified in the policy literature. For example, Venezky et al. (1996) note that we need to know more about the relationship between policy and increases in learner participation, improvement of instruction and outcomes, and better fulfillment of individual, family, and social needs. To date, policy-oriented research has not specifically addressed these questions. Others pose questions related to the potential of improved literacy abilities to increase economic well-being. Although the National Adult Literacy Survey (Kirsch et al. 1993) established a relationship between literacy level and income, little is known about

the role that increases in literacy levels can play in adulthood. One of the difficulties here is in disentangling literacy level from other social inequalities related to race, ethnicity, and class (NCAL 1995). Literacy development does appear to be a promising investment, however, as the economy shifts and high-wage jobs with low literacy demands continue to diminish (Comings, Reder, and Sum 2001).

A major area of policy-related concern is the fact that the field serves only a tiny percentage of potential adult learners (NCSALL 2002). Imel's research synthesis (1996) suggests that responding to this issue would involve considering program content and ensuring better responses to the diversity of learners. Her review of literature argues that many learners avoid ABE programs because they fear the context will be school like (Quigley 1997). Like others, she suggests that at least part of what is at issue is operationalizing a narrow definition of literacy. To reach reluctant learners, definitions must be conceptualized more broadly than as just a set of school skills. For example, media literacy, consumer education, and local history could all be of interest to learners and relevant to their real life concerns.

Policy-related research cuts across the field in the broad ways discussed here, but also intersects with specific topics. These include assessment and accountability and professional development. These are discussed next, both in relation to policy and then more specifically with regard to research on practice.

Assessment and Accountability

In many ways, the anticipation and implementation of the National Reporting System (NRS) has radically altered the discourse on assessment and is a clear example of the field moving toward systematicity and limiting the range of alternative approaches. Programs may use any state-approved assessment instrument, but the reporting demands of the NRS have pushed most states toward a handful of standardized tests. Such requirements do not preclude the use of supplemental performance-based assessment strategies such as portfolios. However, the research on and practitioner activity related to so-called authentic or performance assessment has all but ceased, despite strong evidence that this approach to assessment more effectively reflects actual reading and writing processes, is more descriptive of learner strengths and challenges (thus better informing instruction), and tends to be more contextualized and adult (Fingeret 1992). Much of the current research on assessment is aimed at aligning assessment policy and practice with definitions of literacy, evidence-based research on the components of reading (Askov 2000; Kruidenier 2002b; Merrifield 1998), and standards.

Merrifield (1998) articulated well an important challenge that exists currently. In her widely cited report ***Contested Ground: Performance Accountability in Adult Basic Education***, she observes that a focus on outcomes in adult basic education is in keeping with the times and positive for the field because it encourages a better focus on learner achievement. However, until consensus is reached on the definition of and purposes for literacy, what and how to assess (as well as who will have a voice in determining these) will be contested. The challenge of doing meaningful assessment is further complicated by poor capacity, high student turnover, and the infrastructure weaknesses discussed earlier.

Researchers have also identified numerous technical challenges related to assessment. For example, most standardized assessments for adults rely on grade-level equivalents to convert raw scores into usable information for a wide variety of stakeholders. However, research and common sense suggest that this is a problematic practice because of the many ways in which adults and children are incomparable and because of the multiple ways in which tests derive grade-level equivalency (Askov 2000; Greenberg et al. 1997; Kruidenier 2002a; Venezky 1992). Grade-level equivalents also tend to mask important differences among

learners who test at the same grade level but are distinctive in their specific challenges and strengths (Strucker 1997). Kruidenier (2002b) makes a cogent argument for the usefulness of standardized tests, but notes that no one available test assesses all components of the reading process and none evaluates literacy practices or motivation. There are few assessments that describe progress in writing or math development. He suggests that performance assessments could address many of the current assessment problems faced by the field, but notes that they are typically administered in an informal, ad hoc way and the results usually lack validity and reliability. Kruidenier asserts that there is every reason to believe that performance-based assessment can be valid and reliable, but research investments need to be made to ensure this kind of rigor. At this time, no such investments seem imminent.

A broader challenge faced by the field with regard to assessment is the need to address and satisfy the interests of multiple stakeholders (policymakers and funders, program managers, instructors, learners). Assessment is asked to provide data on population counts to determine need [e.g., the National Adult Literacy Survey (NALS), Kirsch et al. 1993], to provide accountability to funders regarding return on investment, for placement and diagnosis, and as a guide to instruction. Assessment also potentially plays a role in evaluations of instructional approaches and programs at local, state, and federal levels. Given this diversity of purposes, it seems clear that the information needed for each of these may overlap only to a small extent. Unfortunately, assessment instruments designed to address these various needs have all received well-founded criticism from practitioners and researchers alike. From critics who claim that the NALS overcounted the number of low literate adults in the United States to those who find the Tests of Adult Basic Education to be an inadequate tool for capturing what students are actually learning, it is clear that the field is at a crossroads with regard to assessment.

Merrifield (1998) states,"To know what is important to measure requires a decision on what is important. Without a clear vision of this, measurement can become a sterile exercise...What is counted usually becomes 'what counts'" (p. 47). Similarly, she argues, "To avoid the numbers game, you have to measure what you value, and value what you measure" (p. 48). Although it seems likely that 5 years after passage of WIA, most viable programs have found efficient strategies for responding to the demands of the NRS and thus on a certain level have increased accountability, it seems painfully clear that the NRS has not resolved many of the most problematic issues with regard to assessment and, by extension, accountability. Given this fact, it is unfortunate that there is so little commitment from policymakers at the federal level to moving beyond the mechanical task of testing and reporting to a meaningful way of documenting adults' needs for literacy education. Strategic decisions about program placement and instruction could be made by analyzing learners' goals; expectations for teaching and learning; and their strengths and challenges as learners, readers, and writers; and relating what is actually being learned to outcome measures and program evaluations.

Professional Development

There is no empirical evidence that links participation in professional development to improved learner outcomes in adult basic education, and it seems likely that positive learner outcomes are brought about by a complex of factors. Yet, there is a strong intuitive assumption that professional development for ABE practitioners is an important contributing factor in learners successfully meeting their goals and improving their literacy skills (Belzer 2003). Given this assumption, research on professional development is particularly important. There have been three basic strands of research on professional development. These are models of professional development, the impact of professional development, and professional development as it pertains to professionalization of the work force.

One of the most important changes in recent years in professional development in ABE reflects changes in thinking about staff development in K-12. It is a move away from one-shot workshop approaches that emphasize knowledge transmission from so-called experts to novices. Instead, there is a growing call for professional development that creates opportunities for sustained knowledge building and collaboration based on the questions and challenges faced daily by practitioners. One approach that enacts this trend is inquiry-based professional development (Drennon 1994; Lytle, Belzer, and Reumann 1992). Although significant changes in practices are reported as a result of participating in inquiry-based professional development (Drennon 1994; Lytle et al. 1994; Smith and Hofer 2002), there is an indication that to implement it on a large scale, significant changes in the ABE system would be needed. Further complicating the argument for committing increased funds to inquiry-based professional development is the lack of evidence that such professional development produces superior learner outcomes above and beyond what is attained by those not participating in inquiry-based or any other model of professional development.

An evidence-based connection between professional development of almost any kind and learner outcomes is tenuous at best and elusive in practice. Belzer (2003) has suggested that while researchers continue to seek ways to link participation in professional development to learner outcomes, the field should also begin to broaden its definition of professional development impact. She poses five areas of impact, in addition to improved learner outcomes, that may actually be a stand-in for the elusive cause and effect link between professional development and improved learner outcomes. These five areas of impact are changes in classroom practice, in thinking about teaching and learning and professional knowledge, in attitude, in program structures, and in the field. Looking closely at these areas of change may tell us *why* impact on learner outcomes could be expected, even if a direct link can not be identified. Such a broad definition of impact implies a need for the evaluation of professional development that focuses on the specific intended impact of professional development vis a vis the range of potential changes, and is tailored to capturing change at a number of different levels of the field (individual teacher, classroom, program, and across broad networks of practitioners) over time.

Smith and Hofer (2002) argue that the particular model of professional development is less critical to teacher change and improved learner outcomes than are factors related to both the individual and the system that make teachers more or less receptive to learning and more or less able to act on what they are learning. Belzer et al. (2001) conclude that there are system-level features that potentially better enable professional development efforts to influence outcomes. These are the scope of the professional development system, the existence of cooperative leadership between state agency staff and the field, coherence in offerings, and accessibility.

As a complement to research on professional development models and the impact of participation, there has been a body of inquiry related to professionalization of the work force with regard to certification, credentialing, and other signifiers of practitioner preparation and competence. Implicit in calls for professionalization are demands for professional development that is closely related to an agreed-upon body of knowledge and set of skills that are distinctive to adult education and that demonstrate competence. Sabatini et al. (2002) suggest that before such consensus can be reached, the field needs consensus regarding content standards for instruction. They explain that the focus on performance and content standards in K-12 makes clear that alignment is needed between a set of standards for learners and standards for practitioners that will in turn have implications for teacher preparation and inservice professional development. Although debates over professionalizing through some sort of credentialing/certification process will continue, some states have begun to move toward teacher competencies and other plans for

standardizing expectations for professionals. One point that emerges from these efforts is that these systems may be more effective if they are flexible enough to reflect the diversity of the work force and provide a variety of alternatives for acquiring and demonstrating expertise.

In general, the research related to the infrastructure of adult basic education suggests that the field has not developed in many ways that Fingeret foresaw. Many of the gaps are at least as large when she wrote about the field more than 10 years ago. Our summary of policy, assessment and accountability, and professional development research outlines important ways in which the field can and should expand and become more diverse, but also points repeatedly to the ways in which funding and structural issues seem to preclude such developments in the near term.

Selected Topics in

Teaching and Learning

Many topics within adult literacy have seen significant interest over the last 10 years. In this section we examine 11 such topics in order to clarify the state of the field in the early part of the 21st century and to portray the dilemmas faced by the field. The topics have been selected based on the literature available for review and our own judgment of significance, generally based on a sense of innovation or expansion. It would have been hard to predict 10 years ago, for example, that family literacy would grow in significance. The synthesis of literature on teaching and learning represented by these topics indicates fundamental questions that remain unanswered and begins to illustrate our concerns about the ways in which the field is contracting in response to greater institutionalization, tighter limitations on practice, and constricting funding and accountability requirements.

Adult Learning and Development

During the 1990s several new areas of learning theory emerged in adult education. Transformational learning (Mezirow 1991) gained recognition, sociocultural approaches were developed as a separate perspective (Lave and Wenger 1991; Wenger 1998), and constructivism started to influence practice and theory in an explicit manner. Interestingly, researchers in adult literacy education did not engage with any of these areas in a substantive manner. Instead, their focus was on multiple intelligence theory (Gardner 1993), cognitivism, and adult development theory.

Multiple intelligence theory begins with the premise that the conventional view of intelligence as a unitary trait, easily represented by a single measure, is faulty. Instead, the existence of multiple intelligences is asserted. In the early 1990s, eight areas were identified, including linguistic, bodily/kinesthetic, and intrapersonal intelligences (Kallenbach 1999). Researchers in this area suggest that people have different amounts of each kind of intelligence, but everybody has potential that can be developed in each of the eight areas. This idea has come to be widely accepted in preK-12 education, but had been explored very little in adult education generally until the late 1990s, when NCSALL commissioned a major study on the topic.

The Adult Multiple Intelligence (AMI) project was prompted by four chronic challenges in adult literacy education: a high incidence of learning disabilities among learners, low self-efficacy of learners, low retention rates, and limited professional development for instructors (Kallenbach and Viens 2002). The project worked with 10 ABE instructors using a teacher research model, deriving results from both individual experiences and cross-setting analysis. The researchers claim that AMI approaches increase the authenticity of learning experiences, help to make learning meaningful, and reduce teacher directedness (ibid.). However, a close reading of the research suggests that such conclusions need to be interpreted with caution—these results could derive simply from putting a teacher research project in place, irrespective of the topic. In other words, the results could simply have occurred because the teachers were more self-consciously paying attention to their practices.

Cognitive approaches to adult literacy instruction emphasize the learners' thinking processes as the key to understanding the learning process. In general, cognitivism has received a great boost from cybernetics, where computers are used to model thinking processes, leading in turn to new models of thinking. Cromley (2000), a NIFL research fellow, published a report laying out "what the science of thinking and learning has to offer adult education" (p. v). She takes a healthily skeptical approach to cognitivism and many other approaches tending to oversimplification and points out that there is very little known about "how adult basic education students think and learn, and whether they think and learn differently from other adults" (p. vi). This is an important insight given the tendency for some research to assume that difficulty with reading and writing implies difficulty with thinking (e.g., Venezky et al. 1996).

Metacognitive approaches, where learners are encouraged to think about their own thinking, have been advanced as an important breakthrough for adult learning. This reflects the trend in K-12 reading education in which beginning readers are taught to examine their strategies for decoding and comprehending text. Four fundamental characteristics of instruction for metacognitive development have been identified: instruction explicitly includes metacognition, authentic purposes are derived from social context, collaborative learning provides positive reinforcement, and materials and practice are useful and success oriented (Paris and Parecki 1993). It should be apparent that these four characteristics would tend to be present in any effective instruction, yet they are underemphasized in current policy regarding reading instruction in both K-12 and adult literacy education (Kruidenier 2002a; National Institute for Child Health and Human Development 2000).

Finally, adult developmental theory has attracted some attention, once again from NCSALL. The basis for the work was Kegan's (1994) model of adult development as a three-stage process—from instrumental to socializing to self-authoring. The implications of these three stages for teaching have been explored (Drago-Severson et al. 2001), as has the nature of change between the stages (Helsing et al. 2001). Among the emerging recommendations is that learning cohorts could be used more broadly in adult literacy education as they address the needs of people in all stages of development and that change is a highly diverse process (Kegan et al. 2001). This leads to the recommendation that a "New Pluralism" should be developed within the adult learning classroom (ibid.) in order to recognize and address not just the academic, but the developmental diversity of learners. It is worth noting that this approach does not provide a diversity of ends to the developmental process, just different steps on the same ladder.

When summarized as they are here, a single clear message emerges from all three of these areas—the absolutely critical need to recognize the diversity of learning. The theoretical perspective used to support such a need is, we believe, less important than having the issue brought forward and addressed. The implications of new pluralism, metacognitive approaches, and multiple intelligences are likely to look remarkably similar when enacted in instructional practice. Once again we have to advance a caution about the current drive toward evidence-based practices and narrow accountability structures, which can easily obscure the variety necessary to ensure healthy and effective educational practices.

Instructional Strategies

Several researchers have made the argument that practitioners' underlying theories of literacy, learning, and adulthood play an important (if often implicit) shaping role in all aspects of adult literacy education including assessment and intake procedures, curriculum and materials, volunteer training, and program formats (Lytle and Wolfe 1989; Quigley 1997). Such an assertion is of particular relevance in ABE because so much about the field has been undefined and "up for grabs" (although we argue that this has become considerably less so in recent years). This is due, at least in part, to the fact that there is so little research that might confirm effective practices. It may also be indicative of the enormous diversity of learners, goals, and learning contexts in which ABE takes place. Much of the theorizing around instruction revolves around defining and clarifying terms such as critical pedagogy, learner-centered and participatory education, and Freirean and problem-posing approaches, and exploring the complexity of implementing these (philosophical) approaches in the classroom. However, research on instructional practices shows that the theory and the practice do not always match.

Degener (2001) recently offered a useful explanation of critical pedagogy as that which places instruction within efforts to bring about social change and personal transformation through a dialogic learning relationship between learner and instructor. This type of instruction has the goal of giving learners greater access to information that might encourage critique of their personal circumstances and of the larger social structures. Here, literacy education is about social change. Martin (2001) has criticized the notion of critical pedagogy for what it assumes about learners—that they do not have a critical perspective to begin with—and instructors—that they do, thus eliminating the possibility of an instructional relationship of co-learners. She suggests that the larger challenge is to explore what keeps people from *acting* critically (rather than just having a critical perspective) and resisting domination. Addressing these questions means instructors and students need to create opportunities for learning collaboratively in which honest dialogue about difficult and sensitive issues can occur.

Several descriptive studies exist of classrooms and programs that are consciously working at providing literacy education with a social change agenda (Belzer 1998; Martin 2001; Purcell-Gates and Waterman 2000; Reumann 1995) and descriptions of project-based or content-based learning have been provided in ***Focus on Basics*** ("Content-Based Instruction" 1997; "Project-Based Learning" 1998). However, despite the theorizing and descriptive research, evidence suggests that a preponderance of programs and teachers use traditional teacher-directed, decontextualized instructional strategies that are aimed narrowly at improving learners' technical and academic skills in reading, writing, and math (Beder and Medina 2001; Purcell-Gates, Degener, and Jacobson 1998). In one study (Purcell-Gates et al. 1998), 73% of all programs responding to a national survey were identified by researchers as using decontextualized instructional materials and a teacher-directed instructional approach. In another study, Beder and Medina (2001) found that 80% of their sample of classrooms use what they call a "discrete skills and knowledge" approach to instruction. In this study, they observe many similarities between traditional K-12 instruction and ABE. Although they judged many teachers to be learner centered in their affective relationships with learners, they did not see this type of interaction carried through to instruction. Although neither study is generalizable to the entire field, the consistency of their findings (despite distinctive sampling procedures) is quite suggestive. No widespread description of one-to-one instruction has been conducted.

Research on cognition and adult development suggests that instructional approaches which involve adult learners in constructing significant aspects of their instructional program in ways that are goal related and contextualized are preferable. However, there is virtually no research to date that compares various instructional approaches in terms of learner persistence or eventual outcomes in ABE. Regardless of what "best practice" may be, most teachers are coping constantly with open-entry, multilevel classrooms. Their work is now made even more challenging by a rise in nonvoluntary learners due to welfare reform and increased workloads and paperwork related to accountability requirements. Their response is often to depend either wholly or partially on "individualized group instruction" (individualizing materials-based instruction for a group of learners who all meet at the same time and place) as an adaptive instructional strategy (Beder and Medina, personal communication with the author). There is little research on what this looks like in practice (or more important, what best practice using this strategy might look like), thus no models exist for new and experienced teachers to learn from (although this gap is being addressed by currently funded NCSALL research).

Learner Engagement

One long recognized challenge of adult literacy education is finding a way to help learners become and remain engaged with the educational process long enough to attain their

goals (Ziegler and Durant 2001). The challenge is certainly a significant one. It has been estimated that only around 8% of those eligible for adult literacy education are attracted to programs, that the attrition rate is 74%, and that the dropout rate is 18% before 12 hours of instruction, rising to 50% after 16 weeks (Quigley 1997). These figures suggest that only about 2 of every 100 eligible learners complete adult literacy education programs either by getting a GED or some other certificate or by attaining their own goals. However, some caution must be exercised when making this kind of claim, and one study argues strongly that the potential learner population should be estimated from current demand rather than the theoretical greatest possible demand (Venezky and Wagner 1994). Caution may indeed be the best policy when there are few signs of a significant increase in the demand for literacy skills and uncertainty about how learners evaluate the potential returns of adult literacy education.

The learners who currently do attend programs until goal attainment are more often parents of teenaged or grown children, likely to be over 30, and frequently immigrants. Previous experience in adult literacy classes and a specific reason for being there, such as advancement at work, also make goal attainment more likely (Comings, Parrella, and Soricone 2000). Based on this research, the most obvious group of learners at risk of leaving programs is younger learners, a population that seems to be growing in adult programs (Hayes 2000).

When asked why they leave programs, learners often cite money problems, work, transportation, class schedules, and general lack of time (Marshall 1992), but it is difficult to know whether learners are simply choosing to provide socially acceptable reasons for leaving programs. When exploring this issue, researchers found that learners often initially gave conventional replies about structural issues, but when rapport had been established between interviewers and learners, it often emerged that they simply did not like the teaching style of the literacy instructor and felt it was ineffective (Quigley 1997).

Traditionally, the phenomenon of low retention rates has been analyzed from the "dropout" perspective, focusing strongly on individual learners and potential learners. In recent years there has been growing emphasis on programmatic and societal barriers and on the potential mismatch between learners and programs—a change from a "dropout" to a "push out" approach. Cross' (1981) model of barriers to adult education remains influential (D'Amico et al. 2002; Hubble 2000; Wonacott 2001) and useful because it encourages analysts to consider barriers as dispositional (e.g., fear of education), institutional (e.g., time of classes), and situational (e.g., transportation difficulties). It seems likely that inclusion of factors beyond the individual will lead to useful insights into how learners make decisions about participation.

A further broadening of the question of engagement is to rethink what persistence means. Rather than conceiving of persistence as continuous enrollment in a literacy program, it is possible to look at it as "adults staying in programs as long as they can, engaging in self-directed study when they must drop out of their programs, and returning to a program as soon as the demands of their lives allow" (Comings, Parrella, and Soricone 2000, p. 3). This change of definition moves the emphasis from programmatic views of persistence to learner-centered views—they would be defined as persisting as long as they maintained their efforts to improve their literacy abilities, irrespective of program status. This view of persistence is strongly supported by another study of learners who stopped attending an adult literacy program (Belzer 1998b). The learners did not consider themselves dropouts in the conventional sense—rather they were taking a break to attend to other priorities, which could include their job, health problems, financial problems, legal problems, or family problems. One significant challenge to putting this perspective into practice is the need for programs to account for attendance and persistence to funders, making high levels of learner retention a priority for program survival (Quigley 1997). Although a more learner-centered view of persistence may be justifiable

and may capture the experience and progress of learners more accurately, it seems unlikely to be realistic under the current accountability structure.

One interesting approach to learner engagement is to view recruitment and retention as stages in an ongoing process of drawing learners into the educational experience (Bond, Merrill, and Smith 1997). One of the implications of this approach is that learners are considered full participants immediately upon enrollment rather than after the first 12 hours of instruction, which is critical given the likelihood of dropping out early in the program. As much as possible, what attracts learners to the program in the first place should be consistent with what keeps them coming and motivated to learn. Even if participants are not officially counted until the 12-hour mark, they should be deliberately and effectively supported from the point of first contact with the program.

There are a number of strategies programs can use to increase the likelihood of student engagement. Programs can begin by accepting the need to market their services in the broadest sense (Wonacott 2001). This involves everything from accessible publicity materials to the development of a concrete and specific marketing plan with identified market niches and indicators of marketing success (Michael and Hogard 1996). It is important that the promises of the marketing campaign are kept—it would be a grave mistake to emphasize the "nonschool" nature of a program and then have learners sitting in rows completing workbooks. The idea of marketing does not come easily to many adult educators, yet it does provide a set of tools to ensure that potential learners are getting the information they need to make rational decisions about whether and in which program they want to participate.

First contact between the program and the potential participant is crucial to engagement—one common reason for not attending a program is simply that the learner's initial telephone call was never returned (Long 2001). Learners also need as much information about the program as possible, which can be provided by a thorough orientation covering both internal program structures and external conditions bearing on their outcomes, such as the labor market. Information should be provided on the most pragmatic logistical matters, such as program meeting times and responsibilities of instructors and learners, as well as broader topics such as the value of a GED to an employee. It may be helpful for instructors and counselors to find a way to respond as immediately and effectively as possible to learners' first concerns—if initial problems are addressed seriously and supportively by program staff it creates an excellent precedent for later issues as well as making early push-out less likely (Quigley 1998). There is some evidence that program success is related to identifying possible barriers and addressing them during the intake process, as well as designing programs specific to the student's needs (Hubble 2000).

Learners' previous educational experience can often leave them negatively disposed to education, requiring them to "unlearn" their dispositions toward learning as they initially engage with the adult literacy program (Quigley 1995). Recommended strategies include course designs based on needs assessments of learners, emphasis on cultural awareness during instructor training, and use of local instructors. One study based on a quasi-experimental model (Quigley and Uhland 2000) suggests that having a strategy in place to address the needs of students who are likely to be pushed out is more important than the details of that strategy. The findings suggest that placing the most "at-risk" students into small groups of mainstream students (that is, those not identified as at risk of leaving the program) appears to be slightly more effective than either grouping them together or setting up individual tutoring. A related finding of the same study is that adult learners most likely to leave programs also tend to be highly field dependent, making the support and role models available in a small group of mainstream learners a valuable resource (ibid.).

One current study of persistence in library literacy programs (Comings and Cuban 2000)

encourages programs to implement a number of strategies, including child care, transportation, a new curriculum more relevant to adults, expanded hours, teacher and tutor training, new instructional approaches based on peer interactions, and new intake and orientation processes focused on identifying and addressing barriers. Although no results have yet been reported, it is likely that this broad—and deep—approach to engaging learners will make a significant difference to retention. Previous work by the same group of researchers identified four supports for adult persistence (Comings, Parrella, and Soricone 2000), including explicit identification of positive and negative forces acting on the learner to affect persistence; building self-efficacy through mastery experiences, role models, and acknowledgment of emotional states; establishment of clear goals for the student; and clear progress toward a goal.

Another engagement strategy is to involve students in community development projects as part of their literacy learning. In one such project, small groups of students engaged in research including analysis of policy documents, development of agendas and effective questions for meetings with public officials, preparation of position papers, and consensus building (Hart 1998). The attainment of high-level literacy skills is both necessary for and inevitable as an outcome of these activities, leading to an authentic blend of learning and action. However, this approach has not been without cost, as allies have been alienated and the potential for instructors to exploit students for their own political ends remains ever present.

In the end, the best approach for programs may be to work with learners in a broad way to ensure that their experience is as positive as possible during program attendance, that they help learners develop strategies and identify tools and materials for improving their literacy skills whether they are participating in a program or not, and that even if their stated goals are not achieved they leave with some new resources they can use in their daily lives.

Special Populations

Although it is often convenient to refer to learners as if they were a homogenous group, in reality the importance of learner diversity has been increasingly recognized. Learners vary along many dimensions of social placement and life experience. Several dimensions of diversity are seen as sufficiently significant to merit "special population" status for some learners, including those who are African American, have English as a second language, have learning difficulties, are older, are women, are on welfare, are high school dropouts, or are Native American. Not all programs will serve individuals from each special population, but we believe it is useful for administrators and instructors to be aware of the nature and importance of diversity. There is insufficient space to discuss all special populations, and here we have selected two representative examples who have recently received considerable attention—learners with learning difficulties and learners from diverse ethnic and racial backgrounds.

A review of the literature suggests that the special population that has received most attention over the last few years is learners with learning difficulties. A useful background piece published by Laubach Literacy Action and Literacy Volunteers of America (2000) provides the legal context for increasing acknowledgment of this group. The Americans with Disabilities Act of 1990 (P.L. 101-336) defines an individual as having a disability if he or she has a record of, or is regarded as, having a physical of mental impairment that substantially limits one or more major life activities. Title II of the act requires that educational programs make reasonable modifications to their operations for these individuals in order to avoid discrimination and unnecessary barriers. The most significant attempt to provide clear, concrete guidance to programs on how they can work with learners with learning difficulties is the Bridges to Practice System (National Adult Literacy and Learning Disabilities Center 1999). The instructional recommendations of most experts on

learning difficulties are very similar to what is generally regarded as good practice in adult education, and the presence of difficulties "is secondary to instructors' attempts to create a humane and supportive relationship with learners" (Covington 2003, p. 2).

It is extremely challenging to ascertain how many learners may be affected by learning difficulties, with estimates ranging from 4.49% of the K-12 school system to over 50% in adult basic education classes (Corley and Taymans 2002). Interestingly, the number and proportion of GED test takers seeking special accommodations fell recently from a 1996 high of almost 3,500 to 2,267 in 1998, much less than half of 1% ("Fewer Learning Disabled" 1999). If 50% of adult literacy learners are indeed working with a learning difficulty and yet less than 1% request accommodation at the GED, it raises the question of how well adult literacy programs are serving this population. One possible explanation is that the programs are reproducing the failure patterns of K-12 education by pushing out those with learning disabilities before they reach the GED level. Otherwise, many more adults with learning disabilities, and willing to request accommodation for them, would be taking the GED.

Another explanation may be that current conceptions of learning difficulties are ill defined and leave much to self-report and subjective interpretation. The advantage of being aware of potential learning difficulties in the adult literacy population is the possibility of addressing them once they have been identified. However, there has been a tendency to overdiagnose—to assume that if adults have difficulties with literacy then they must have difficulties with learning. This masks the many other factors that have an effect on adults' use of written language, such as socioeconomic status. Although the notion of learning difficulties in adults is useful, it might be wise to apply it cautiously in practice.

Culturally and racially diverse learners form a different type of special population, where membership is frequently immediately visible and can represent hundreds of years of social and educational discrimination. For the purposes of our discussion we have chosen to look in more detail at African American learners, a group with a mixed history in the U.S. educational system. Some of the country's most influential figures have been African American, yet discrimination against members of this group is a constant background presence. In North Carolina in the 1830s, for example, people teaching slaves to read or write could be punished by 39 lashes (Sticht 2002). Yet all too often adult education is expected to be able to reverse history and reduce social inequality (D'Amico 2003). One tension of working with African American learners is the extent to which issues of race should be recognized and addressed within the literacy classroom. The two main approaches that have been suggested are multicultural education, where the object is to raise awareness of diversity, and antiracist education, aimed at identifying and exploring what it means to be African American in the United States. One organization in New Orleans believes the most effective approach is explicitly antiracist educational practices that build authentic relationships across racial lines (Freeman and Johnson 2003).

If programs are to become more supportive of African Americans and other nondominant racial and ethnic minorities, it is important to address how materials, learning environment, and methods situate their histories, cultures, languages, and experiences within the dominant culture (Sheared 1999). One critical element is for educators—regardless of their own cultural, racial, and ethnic backgrounds—to move beyond the assumption that what they have to offer is intrinsically valuable and find a way to identify the value of literacy within the culture of learners. It is also important to avoid stereotyping learners and to find ways to discover what individual learners see as more and less helpful within an educational context. One significant concern is the limited degree to which the issues of learners can ever be transparent to those from different cultures, and especially whether White educators can ever truly engage with the issues of Black and other minority learners (Cumming-McCann 2003).

We close with a reflection and a challenge. The identification of special populations implies that there is a "normal" population in adult basic education. As experienced practitioners and researchers we find this notion unsustainable and hold that diversity is a fundamental aspect of adult literacy work. The idea of special populations can be viewed as a product of the standardization accompanying the institutionalization of adult literacy education—if there were no standardization then learners would be treated as diverse individuals rather than people who deviate from an assumed norm. The benefit of focus on special populations is the opportunity to allow for individualized and learner-centered instruction in the face of increasingly centralized curriculum and methods. However, the potential cost is acceptance of a deficit perspective, where the learner is seen as lacking something, as a fundamental aspect of literacy programs.

Trauma

One issue recognized only very recently in literacy education is the impact of trauma on adults' ability to learn. This concern, although related to health literacy and to learning theories, has the potential in our opinion to have such a significant effect on the field that separate acknowledgment is necessary. One of the most dominant voices calling for trauma to be recognized as a factor in adult literacy education is Canadian community educator Jenny Horsman (Horsman 1999, 2001; Morrish, Horsman, and Hofer 2002). Horsman originally conceived her area of interest as focusing on the effects of violence on female adult literacy learners. Over time, however, she began to feel that it was more useful to talk of trauma rather than violence, as this shifts the focus from the historical events of violence—which can vary widely in form and severity—to the reactions of the learners (Horsman 1998). One of the strengths of Horsman's work is that she provides clear and practical insights into how trauma can be recognized within the educational process.

A continuing theme of Horsman's work (2001; Morrish, Horsman, and Hofer 2002) is that it is not acceptable to treat trauma as an experience a few, or even most, adult literacy learners bring to the classroom. Instead, instructors must work to make educational settings generally more comfortable for everybody including those people whose lives have been touched by trauma. She writes of a number of educational discourses that make discussion of, and reaction to, issues of violence problematic. One is the "severed head," where the mind is developed but other aspects of the person ignored (Horsman 2001). Another is the notion that "they won't learn until they are ready" (Horsman 2001, p. 14). It may make a lot more sense to consider "helping them to be ready" as part of the education process, since trauma survivors may have to learn a number of skills to be ready to enter an educational program. An example of such a skill is goal setting. Traumatized individuals may find it hard to sustain the belief that they can control outcomes, leading either to overambitious goals that they are bound not to attain or refusal to set goals at all (Horsman 1999). Although this difficulty is easy to understand for trauma survivors, setting realistic goals is difficult for many adult learners. Thus, explicit work in this area can be helpful to all learners.

Morrish (2002) describes a project setting out to tackle violence, and she suggests that "addressing violence does not mean inviting everyone to disclose...It means creating the conditions for learning that name and recognize the presence of violence in our lives" (pp. 19-20). When education level is strongly linked to the incidence of domestic violence (Bachman and Saltzman 1995), and 20-30% of women receiving welfare are current victims of domestic violence (Raphael 2000), it is not difficult to make a case for trauma to be more widely recognized and acknowledged as a silent presence in the classroom. Taking this step should not resemble group therapy, but rather a thoughtful and respectful recognition of the experience of trauma and its effect on learning.

Reading, Writing, and Numeracy

Research on reading, writing, and numeracy has taken distinctively different paths. These differences parallel similar trends in K-12 education. The discourse on reading research in K-12 is currently being defined largely by an increased emphasis on "evidence-based research" (e.g., the use of experimental design)—one of the four pillars of the No Child Left Behind Act, and the findings of the 2000 National Reading Panel (NRP). The NRP was charged with identifying and synthesizing high-quality, rigorous research studies on reading instruction as a way to improve effectiveness. These two initiatives have brought forward an emphasis on phonemic awareness as a key criterion for judging excellence in reading instruction. In contrast, research and practice in math education in K-12 and numeracy in adult basic education have taken a distinctively constructivist path, emphasizing conceptual development and contextualized instruction. Writing research, given the current emphasis on reading, has dwindled. There is little talk of the important interconnection between reading and writing development. There is no major funded research currently underway on writing development for adults.

In an effort similar to that of the NRP, a panel of experts was convened to evaluate and synthesize reading research on adults using similar quantitative criteria to assess the quality of the research. The resulting report (Kruidenier 2002a) derived similar findings to that of the NRP but was based on a scant number of studies and was more suggestive than conclusive. Building on the same topics used by the NRP, the findings focused on research related to phonemic awareness, fluency, vocabulary, and comprehension. In addition, research on assessment and technology was summarized. In spite of the efforts of this review, a fundamental question regarding the differences between reading development and instruction for children and adults remains (Kruidenier 2002b; Perfetti and Marron 1995; Venezky et al. 1998; etc.). Some research indicates that adults who test at the same grade level equivalency are distinctive from each other and from children along several measures (Greenberg et al. 1997; Strucker 1997). Similarly, there is debate about how many adult learners have learning disabilities, how instruction for those who do should differ from instruction for those who do not (Fowler and Scarborough 1993), and whether they are more or less like younger readers with or without learning disabilities. However, there is some consensus among researchers, regardless of the answer to these questions. Evidence seems to suggest that most struggling adult readers at the lowest levels lack sufficient phonemic awareness to develop fluency and automaticity.

One study indicates that adults most commonly use meaning-based cues to identify words and suggests that this is a strength that should be built upon (Campbell and Malicky 2002). Another indicates that reading skill development taught using contextualized, real-life materials (Purcell-Gates et al. 2002) increases the frequency and type of literacy activity engaged in outside of class better than decontextualized subskills instruction. However, current thinking seems to be pushing the field toward a focus on teaching reading as a linear set of decontextualized phonics skills (Kruidenier 2002a) followed by comprehension, fluency, and vocabulary study rather than as a practice shaped by social context and strengthened by mutual development of all components of the reading process along with writing, speaking, and listening skills. Actual reading practice is "an unequaled training procedure" (Perfetti and Marron 1995, p. 21), but the more developing readers struggle, the less they read, the less experience with reading they get, and the less development can occur (Venezky et al. 1998). This vicious circle must be taken into consideration in the messages conveyed through instruction. Emphasis on phonics and school-like reading tasks may enable learners to read some texts more fluently, but may lead to learners feeling unmotivated to read (Belzer 2002), and disconnected from the text and from literacy learning generally. Although this quandary is present in reading

instruction for children, it is magnified for adults who have limited time to learn and possibly a lifetime of negative feelings and experiences regarding reading instruction.

Fingeret's definition of literacy as culturally constructed and multiple has been strengthened over time by researchers of "New Literacy Studies" (Barton 1994; Barton, Hamilton, and Ivanic 2000). They have demonstrated that literacy is a complex concept encompassing a broad range of practices, purposes, and contexts. Their insights often make sense to practitioners, fitting well with intuitive understandings and explaining many of the phenomena of the practice situation. Unfortunately, this perspective tends to add complexity rather than provide a unidimensional set of measurable skills as demanded by the current policy and accountability context. So although it is often useful to practitioners, the new literacy studies approach is not a powerful tool for arguing that literacy should be—and indeed must be—more than phonics and standardized tests. We are concerned that the current trends in reading instruction are not based on evidence, despite claims that they are (Allington 2002). In an effort to make reading instruction more systematic, practice is often being limited in ways that are not necessarily helpful or responsive to adult learners. Simply put, despite the production of a more organized body of research on teaching reading to adults, there is still much we do not know, and it is premature to mandate overly prescriptive instructional practices. Although we enthusiastically applaud efforts to improve reading instruction, doing so by limiting opportunities to read texts that are meaningful to adults is to be seriously questioned.

Debates over reading research and instruction used to be defined as a war between phonics and whole language advocates. A rapprochement known as "balanced literacy" was brokered several years ago. However, the NRP has given the impression that phonics advocates have, in the end, won. Although few of even the staunchest advocates of systematic phonics instruction would argue against some of the hallmarks of whole language instruction such as the use of literature in the classroom, the issue is a question of emphasis. In contrast, math research and practice have moved distinctively toward what might be seen as the math parallel to whole language literacy instruction. Based on notions of constructivism, the emphasis of the National Council of Teachers of Mathematics (NCTM) Standards is on conceptual understanding and the development of mathematical thinking and communication skills. Here, math facts and algorithms are developed and practiced in the context of problem solving.

Even less so than reading, there is almost no research on adult development of numeracy. As with literacy, there is no consensus on the meaning of the term "numeracy." However, some of the themes that seem to emerge in a range of definitions include differentiating between everyday math and academic math or "street" math and "school math" (Safford 2000); the idea that numeracy is not a fixed set of neutral skills, but is rather a set of cultural practices (Kerka 1995); that interpreting, analyzing, and functionally using math concepts is a primary goal of instruction; and that numeracy instruction (as opposed to math instruction) draws on authentic and contextualized materials and problems (Tout and Schmitt 2002). Math education that involves learners in constructing knowledge by drawing on their own mathematical experience and strategies to solve complex mathematical problems as a way to build mathematical thinking and problem-solving skills means that teachers play an extremely important role in creating opportunities to learn. This kind of learning cannot be driven by the instructional programs typical of commercially published workbooks. However, few ABE teachers have training in math education (Schmitt 2002), and even fewer have had professional development based on the NCTM standards.

Despite new content standards for math education and some funding for the development of math curriculum for adults based on these standards (Schmitt 2002), math instruction is often ignored in ABE classrooms because it is not necessarily considered an essential part of

literacy education. When it is taught, instruction is usually driven by the GED math test and commercially prepared materials that emphasize a skill and drill approach to mastery of a linear progression of procedures (Tout and Schmitt 2002). Similar to reading research, much more information about how adults' mathematical thinking develops is needed, as is descriptive research on how adults use math to solve problems in their daily lives. In order to increase and strengthen math instruction in ABE, policy and funding must reflect a commitment to math education for adults. More important, a paradigm shift regarding numeracy as an educational priority must take place at all levels of the system.

Unfortunately, little attention is currently focused on writing instruction in ABE. Just as in reading and math, the research base on adult writing development is scant. The shift in focus from product (with an emphasis on the technical, skill-based aspects of writing) to process (with an emphasis on the creative process and developing knowledge about how writers write) in the 1970s and 1980s, and the addition of a required essay as part of the GED, helped bring attention to writing in ABE. However, we know relatively little about how much writing is actually taught, how it is taught, and the ways in which adults' attitudes about writing shape their efforts. Gillespie (2001) argues that studies on the social context of adult literacy education suggest that prior experiences in school shape adults' perspectives on literacy. There seem to be concrete reasons to alleviate the tensions often associated with these past experiences as a way to move forward educationally, which may include reexamining beliefs about learning and literacy. Writing can be used to bring about such potential transformations.

Writing for a wide variety of purposes and audiences can be taught in ways that are contextualized and authentic at the same time that learners are encouraged to (re)examine their assumptions, develop their voices, build capacity for critical reflection, and construct meaning (Kerka 1996). Personal writing (e.g., narratives and journals) can be particularly powerful in encouraging this kind of development (Wallis 1995). However, the research that does exist indicates that, similar to math instruction, most teachers use a traditional, skills-based approach to teach writing. In addition, there is evidence that students will resist writing instruction that varies from a traditional skills-driven approach (Gillespie 2001). Russell (1999) suggests that many ABE learners have a mental model of writing that includes valuing form over content and have great anxiety about making technical mistakes. Consequently, many want to avoid writing altogether (Wallis 1995). When teachers try to provide an alternative model, learners are not easily swayed. Trying to convince them of the benefits of such instruction can then create more anxiety. Wallis suggests that we need to know far more about what learners think about writing, and we need more strategies to address learners' misconceptions about writing.

Three clear themes cut across research on reading, math, and writing development and instruction for adults. The first is the extent to which research on children's learning can be applied to adults. This question is particularly important to address given the scant amount of research done with adults and the limited funding base to carry it out. The second, interconnected theme is a need to understand better the ways in which previous experiences with learning influence adult learning when it comes to literacy development. Clearly, attitudes, assumptions, and acquired knowledge and skills constructed through previous experiences with school and a diverse set of life experiences—for better or worse—help shape what adult learners bring to the table in ways that are qualitatively different from children. These differences cannot be underestimated in calculating the ways in which research and instruction should be conducted for adults. The third theme, common to research on reading, writing, and math instruction for children, is ways to balance and integrate skills mastery and more holistic understandings of the purposes, processes, and strategic accomplishment of reading, writing, and math.

Teaching the GED

The test of General Educational Development (GED) has been offered to adult learners for almost 60 years as a second-chance alternative to high school graduation (Tyler, Murnane, and Willett 2000). Within the adult basic education system, GED instruction can be viewed as the other end of the continuum from basic literacy and numeracy classes, as it represents the last stage before exiting ABE classes. One effect of this placement is that GED attainment must be seen as a credible indicator of readiness for college or employment. There have been a series of changes to the test to ensure the award retains this value.

The most recent changes occurred in early 2002. They are based on comparisons between the knowledge required to pass the GED and that held by the current cohort of graduating high school seniors (Mohr and Halbrook 2000). In general, recent trends in GED testing have been toward more comprehension-based assessments and away from memorization. For example, the science component now is designed to use everyday experiences to demonstrate understanding of scientific principles (ibid.). Similarly, the social studies component has recently increased the proportion of visually based questions from 30 to 60% in order to reflect a more television and graphically oriented society (Hoover 1999). As a final example of the commitment of GED designers to continuous improvement of the test, the writing component now emphasizes the ability to revise, edit, and write clearly more than abstract identification of grammatical principles.

Because of these changes, some educators promote the GED not as a skills test, but as a thinking test: "Content in each of the five subject areas is important; however, if students cannot use core knowledge (content) and comprehension skills through application, analysis, synthesis, and evaluation, they will not be able to answer the questions on the test" (Guglielmino 2002, p. 4-1). This perspective leads to a number of alternative approaches to teaching for the GED.

Any discussion of alternative approaches to teaching GED material has to begin by recognizing that student workbooks are widely used. One instructor (Jean 1999) reports that she tried to go beyond the traditional activities provided by the workbooks by bringing multiple intelligence theory (see the section on adult learning and development on p. 20) into the GED classroom. She designed lessons in which students tackled activities such as "Using mime, dance, or a play, show what would happen to you if you were standing on each planet" and "Describe the planets musically" (p. 5). Jean concluded that creating alternative pathways through the material was invaluable, both for students with learning disabilities and those without.

Another way to augment or replace workbooks is to create projects related to GED topics. One such system has been developed by a group of educators in Virginia (GED as Project 2003) emphasizing analysis, creativity, and practicality. They assert that although traditional schooling develops analytical skills, it does little to support growth in the other two areas. Returning adult learners, they suggest, have great reserves of practicality and creativity that should be drawn upon in their GED programs. The GED test should be viewed as a multifaceted project rather than a one-time hurdle. The document they developed contains many useful strategies for educators who would like to attempt a more project-oriented classroom process, and it argues that project-based approaches allow program participants to develop as lifelong learners as well as pass the GED (ibid.).

A similar approach was developed in a San Antonio GED and job readiness program (Green 1998). The central activity was preparing a series of presentations for high school students on the difficulties created by not finishing grade 12. The author concludes that "for the instructor, the challenges lie not so much in carrying out the actual project but in being able to assume effectively the role of mentor and coach rather than dispenser of solutions" (p. 10).

One central question is whether getting a GED really does provide individuals with access to better jobs and postsecondary education. There is some evidence of a 10-20% earnings gain associated with GED attainment, but this is most likely true among the least-skilled GED students, who enter programs with weaker cognitive skills (Tyler 2002). These gains also take several years to appear, but can be predicted by final GED score. Nonetheless the earnings of GED recipients are substantially lower than those of high schools graduates over the long term. A recent review of the literature (Brown 2000) suggests that GED recipients are accepted into postsecondary education as often as high school graduates and do as well once there. Intangible benefits of GED attainment include higher self-esteem, greater likelihood of continued learning and financial security, more full-time and less interrupted employment patterns, and increased likelihood that graduates will encourage their children to attend school (Brown 2000; Tyler, Murnane, and Willett 2000). Other authors caution that the GED alone is not enough for successful employment—learners still need to demonstrate personal responsibility, solid self-image, and good interpersonal skills (Green 1998).

In summary, the GED appears to be a desirable goal for many adult learners, and the recent emphasis on comprehension is likely to increase the intangible benefits for learners. Project-based learning opens opportunities for a creative and fertile approach to what could easily be drudgery for learners and instructors alike, but there is still a need to exercise caution about claims that the GED alone is likely to transform the lives of recipients. Getting a GED does not make the barriers of race, class, gender, or a weak local economy disappear. It is also not clear that a single GED mechanism is the best way to assess learners, even within the test-happy educational system of the United States. There are many more inclusive strategies available, such as individualized evaluation related to employment rather than academics for those who have vocational goals, or portfolio-based authentic assessments. As it stands, the GED test is both the pinnacle of the adult basic education system and one of the mechanisms driving it toward standardization.

Family Literacy

Family literacy developed a great deal during the 1990s, growing from a marginal area of service provision to a central venue for adult literacy education. This provision is based on the premise that parents (or other responsible adults, but it is usually stated as parents) play a critical role in ensuring that children attain the literacy skills needed for success in society. The first person to research the role of parents in depth was Taylor (1983) who examined a number of middle-class families to discover what they did to ensure that their children were prepared to enter school and be successful. She followed up with other studies (Taylor 1988; Taylor and Dorsey-Gaines 1993) that demonstrated the strength and capacity of nonmiddle-class families in preparing their children for success in school, findings that ran counter to an implicit assumption of deficit found in policy and practice.

By that time the notion that families should be treated as a learning unit had become popular. It often follows from the argument that parents are the first teachers of children that they themselves must have a high degree of literacy in order to teach effectively, and that if parents are not fully engaged with literacy it is appropriate to provide services to the whole family in order to increase the recognition of literacy in the home (St. Clair and Sandlin, in press). Family literacy was formally established and recognized as an instructional context with the establishment of the National Center for Family Literacy in 1989 and the passage of legislation supporting family literacy in 1991. Even Start is the predominant source for funding family literacy programs, providing states with $250 million in 2002.

When family literacy was first getting established, multiple models of provision were used and considered valid (Nickse 1993). For federally and state-funded programs, there is now an

almost universal mandate of the Kenan model of family literacy, developed in Kentucky in the late 1980s (Seaman et al. 1991). This four-component model—adult education, early childhood education, parenting education, and parent and child together time—has become the norm in legislation, making it more difficult to develop other models of intergenerational literacy support. For example, the parenting education component implicitly equates the need for literacy learning with the need for parenting help—if one cannot read and write to some external standard, one is assumed to be a deficient parent. There are a number of such pejorative values embedded within family literacy as it is currently practiced.

A number of pieces of the family literacy puzzle are still missing (Padak, Sapin, and Baycich 2002). We do not know enough about how children's interactions with parents and caregivers affect literacy development, how family and adult literacy programs can build effective and supportive learning relationships between adults and children, and the degree to which family literacy is about adults being taught to develop children's school-centered literacy rather than authentically shared literacy (Gadsden 2002; St. Clair and Heitzman 2003; Tett and St. Clair 1997). Neither do we know how the existence of various language communities plays into the home/school interaction. In essence, the questions reflect concerns about what kinds of literacy are valued in the home and in society (Brown 1998). Often family literacy programs are situated in schools and run by school staff, so it is little surprise that their provision is frequently underpinned by K-12 rather than adult education principles.

One concern that we believe arises clearly from family literacy is the extent to which adult literacy is conceived as a means to an end. It would be possible to argue that family literacy uses the involvement of adults as a means to support child literacy rather than a worthy goal in itself. The importance given to parenting education would seem to add credibility to this concern. However, it seems likely that these questions will be rendered irrelevant by an expansion of the employment focus into family literacy—it is likely that obtaining work will increasingly become a mandated goal for adult participants (Alamprese 1999). If so, family literacy will have become a broader program than a literacy program, more reminiscent of welfare to work and similar initiatives. The main challenge for family literacy programs over the next few years will be to find a way to justify its existence as a field, since the returns on such work are very long term and hard to express through current accountability mechanisms.

Work Force Literacy

The vocational aspects of adult literacy education have become more explicit during the last decade. Overall, there appear to be two ways of thinking about the connection between literacy and work. One is the individual focus, where literacy is presented as a tool for workers to improve their employment chances (Comings, Sum, and Uvin 2000). The other is the national productivity argument, where skills are viewed primarily as the human capital necessary to make the U.S. economy competitive in the global economy (Council for Advancement of Adult Literacy 2002). These arguments are highly complementary and have helped to support the policy changes discussed in an earlier section of this document. The underlying assumption in both is that "more literacy equals more money" for individuals and society.

In this discussion we concentrate on one type of work-related literacy provision, work force literacy education. This term includes programs designed to support literacy skill development among the general population of workers and potential workers, with preemployment programs being a common example of service provision. Unemployed people get training in basic literacy (occasionally up to the GED level) along with resume writing, interview skills, and other knowledge potentially helpful for gaining and maintaining employment. There are also workplace literacy programs, in which

current employees at a worksite (or sometimes within an employment sector) participate in basic skills education, often tied to specific job tasks of the participants. Workplace programs are effective (Levenson 2001) but not as common as work force education. Currently, work force literacy education programs are the most significant site of adult literacy education related to work (although this represents a shift from an emphasis on workplace literacy during the early and mid-90s), and attract significant state and federal funds. In fact, in several states, work force education programs are the predominant form of adult basic education provision.

Welfare-to-work programs, those that prepare low-income unemployed or underemployed adults for work, frequently provide adult literacy education to participants. The Welfare Reform Act of 1996, with its work-first imperative, mandated that literacy programs serving welfare clients must provide education designed to get people into jobs as quickly as possible (Sparks 1999b). The other half of the literacy and work equation is the Workforce Investment Act of 1998, Title II, which tied adult education and literacy funding to preparation for work. Taken together, these two pieces of legislation moved adult literacy from residing squarely in the educational realm to an overlapping realm between education, welfare, and work force development.

These changes have been extremely controversial. Studies suggest that welfare recipients have low literacy skills and will find it hard to get work without substantial educational opportunities (Levenson, Reardon, and Schmidt 1999), which work force literacy programs may be able to provide. Several reports suggest that participants enjoy these programs and gain self-esteem and self-efficacy from them (Fagnoni 1999; Wikelund 1993). However, caution and criticism have been far more common reactions in the literature. On a pragmatic level, it is unclear whether it is better to place people into work as quickly as possible, supporting only the very basic literacy they need for that particular position, or provide more extensive education and hope to develop the broader skills necessary for long-term success (D'Amico 1997; General Accounting Office 1999). If only short-term success is measured, as suggested by the work-first approach, then participants should receive only the limited amount of educational support needed for a particular job. It appears that there has been a philosophical shift in many welfare-to-work programs from human capital development to rapid labor force attachment (Fisher 1999). However, there is some evidence that "emphasis on just getting people into work will not result in employment for self-sufficiency" (Imel 1998, p. 2) and that programs offering both job preparation and basic skills tend to have the most positive impact upon participants' employment (Imel 2000; Jurmo 1998).

On a philosophical level, many adult educators believe that folding adult education into work force preparation limits the kinds of education that can be provided and contradicts the democratic history of the field (Imel 1998). Some of the harshest criticism of the work force literacy approach concerns its reduction of education to economic strategy, whether on the policy or individual level (Sandlin 2001). It has been pointed out many times that there are multiple factors which play a role in linking literacy skills and employment (such as availability of work, transportation, oppressive and prejudicial practices), and that "blaming" the individuals for their employment status is dissimulation (D'Amico 1999; Sandlin 2001; Sparks 1999a; St. Clair and Sandlin, in press). Work force program models also tend to overlook the nature of underemployment. Historically, research shows that most people do not stay on welfare for years, unwilling to work, but circulate between unstable, low-wage, temporary jobs and public assistance (D'Amico 1999). There is little evidence that literacy education breaks this cycle and little consideration at the policy level of whether learners have the skills to move beyond entry-level positions (Hayes 1999). In other words, work force programs are a way to make it appear as if the various levels of government are taking unemployment seriously and reacting responsibly, even though they may be a waste of time for all involved. The work-first

philosophy makes it increasingly hard for people to achieve the education they need to increase their economic opportunities as low-skill/living wage jobs become less common (Levenson 1999).

The work force emphasis in adult literacy education is unlikely to weaken in the near future. Adult educators are going to have to find a way to work within the expectations of employers and governments who assume a simplistic view of the links between literacy and social and individual economic benefit. The challenge will be to find a way to develop a "both/and" approach that acknowledges the importance of vocation while supporting the right of participants to a full range of educational opportunities due to all citizens (Imel 1998).

Health Literacy

Over the last 10 years one of the most interesting new areas to emerge in literacy work has been the health literacy specialization. Since its inception, it has evolved from asking whether patients have the knowledge to understand health-related texts (a classic deficit model) to considering the entire health care transaction including the issues of power between the patient and medical provider. Many practice and research-based projects centered on issues of health, domestic violence, and literacy practices demonstrate this developing perspective (Kerka 2000), even though it does not fall under the mainstream literacy funding net.

The definition of health literacy is interesting in itself. One recent, and typical definition suggests "health literacy is the knowledge and skills needed to be aware of one's own health beliefs and practices [and] make personal choices about health and health care options" (Singleton 2003, p. 5). As suggested in an ERIC practice application brief, "in the context of health, 'literacy' means more than being able to read a prescription label; it also includes critical abilities to interpret media messages, as well as the capacity to access and use technologies that deliver health information" (Kerka 2000, p. 1). This definition is a long way from concerns about people being able to understand instructions on medicine bottles.

Epidemiologists have been collecting information on educational levels (along with occupation and income) as a proxy for socioeconomic status for some time, and there are numerous studies showing a positive correlation between years of schooling and health (Rudd, Moeykens, and Colton 2000). In other words, better-educated individuals tend to be both richer and healthier. Recently, however, researchers have begun to think about educational attainment, including literacy, as a powerful influence on health in its own right, and not just a way to represent income (ibid.). This has given rise to two concerns: (1) the connection between literacy skills and health outcomes and (2) the health literacy of patients.

Literacy skills affect health outcomes in a variety of ways. The ability to read and follow treatment instructions is an obvious example, but there are other complex texts related to health care such as informed consent forms, insurance reimbursement documents, and health insurance plans (ibid.). The readability of the various documents themselves has been a major concern, with more than 200 studies suggesting that they are written at an inappropriately high level (Rudd 2002). Efforts are underway to improve the readability of health education materials and to increase the effectiveness of communication between health care providers and patients (Freebody and Freiberg 1997). Some researchers focus on ways to simplify the written language used in health care, whereas others argue that materials are often culturally biased and need to be rewritten in more appropriate ways (Doak, Doak, and Root 1996).

The health literacy of patients can be approached in two ways. One is to look at the general literacy of patients, reflecting concerns about whether patients are able to decode written recommendations on the most pragmatic level. For example, can they read and understand a label informing them that they should take two pills three times a day? This kind of

question led researchers (Davis et al. 1990) to develop the Rapid Estimate of Adult Literacy in Medicine assessment tool to allow comparisons between the health knowledge and practices of people with different literacy levels. The National Adult Literacy Survey of the early 1990s suggested that there were many more people with literacy challenges in the United States than previously imagined, leading to several health-centered follow-up studies. Parker et al. (1995) and Williams et al. (1995) created the widely used Test of Functional Health Literacy in Adults and tested hospital patients. They found that "41% of patients did not understand basic instructions, 26% did not understand appointment slips, and 60% did not understand informed consent forms" (Rudd 2002, p. 4).

The second approach to health literacy is much more political and looks at how patients can best be empowered within the health system. Hohn (1998) describes an action research project conducted with an adult literacy provider in Massachusetts. Student health action teams identified and investigated health issues relevant to themselves and their community, created educational programs, and conducted workshops with community leaders. Literacy and health education complemented each other, and "voice, perceptions of self, and action in relation to health showed significant change" (Hohn 1998, p. 2). The Health and Adult Literacy and Learning Study sponsored by NCSALL has been an important vehicle for making the issue of health literacy more visible. Interestingly, the implications for improving health literacy involve medical practitioners as well as patients; they offer a real opportunity to move beyond perspectives of patient deficit (Rudd and Moeykens 1999).

It is somewhat ironic that as adult literacy in general has moved toward a more instrumental view (often predicated on the "medical model" of research), health literacy has moved in the opposite direction. Starting from a concern that patients could not read labels, it has grown into a significant source of critique regarding the interaction between health care providers and the people they are trying to assist—the patients. Health literacy offers some useful pointers for other areas of literacy work. Steadfastly pragmatic, health literacy practitioners have come to realize that decoding without the knowledge to create meaning, and the power to act on that meaning, is pointless.

Finally, health issues and literacy issues share the context of poverty (Norton 1997). Just as literacy abilities alone cannot ameliorate economic disadvantage, increased comprehension of written health materials is futile without the money to make healthy dietary choices, for example. It is critical to emphasize the overarching disempowerment of economic marginalization if we are to find a way to help individuals and society become healthier.

Technology

During the last decade there can be little doubt that computer technology has had a significant impact upon many aspects of the lives of North Americans. Yet, the impact upon instructional practices within adult literacy education has been relatively limited. For the purposes of this discussion we use technology to refer to computer-based applications, though we recognize that audio, video, and other such tools are also technological. Also it is worth noting that, as yet, the research on technology in ABE is relatively limited—for example, there is little in-depth information on integrating the Internet into adult literacy education.

Some remarkable claims have been made regarding the potential of technology. These include the opportunity to "improve both educational attainment and skill acquisition...bridge the gap between educational disparities of race, income, and religion...contribute to accountability...provide a relevant and appropriate context for adult learning...empower adult learners" (Hopey 1998, pp. 4-5). Yet it must be acknowledged that there is little unequivocal evidence that these claims are justified, and one of the problems with obtaining such evidence is the huge range of contexts in which technology can be used and forms that it can take—there

are so many ways to design computer-assisted instruction, ranging from individual learners sitting at computers working on educational software to participating in online learning communities (Russell and Ginsburg 1999). Berger (2001) attempts to tackle this complexity by reviewing research studies on the use of technology, considering both whether technology is useful and what form is most effective. He concludes that although there may be limited evidence that computer-assisted instruction (CAI) is effective for learners with fourth- to sixth-grade reading levels, in general the studies are not of sufficient quality to support firm conclusions. This conclusion is far from the claimed potential of technology and does not offer much help in making instructional decisions. Without knowing what is likely to be effective for particular learners, instructors are reduced to trial and error informed primarily by their own experience.

Many studies talk about the advantages technology offers from a theoretical viewpoint (see, for example, Cowles 1997; Hopey 1998; Jaffee 2001; Osei 2001; Stites 1998; Wagner and Hopey 1998; Wagner and Venezky 1999) and setting out arguments for implementing CAI. These include mobility (achieved through the use of laptop computers), increase in instructional hours, independence, peer interaction (Snowden 2000), privacy, instant feedback, the possibility of studying at any time, and the self-esteem associated with mastery of a new technology (Jaffee 2001). A slightly different, but extremely interesting, argument is that literacy and technology are becoming interdependent (Wagner 2001). They are both tools to amplify human intelligence and capability and are potentially synergistic. In other words, it may be essential to teach reading, writing, numeracy, and computer operation together if learners are to be fully literate.

One consistent call throughout the literature is for the development of more interesting, age-appropriate software (cf. Osei 2001). However, it is unlikely that software developers will invest a great deal in this area while sales are as limited as they currently are (Wagner and Hopey 1998). This raises our final concern, which is whether the integration of literacy and technology leads to an inevitable corporatization of adult literacy education in much the same way that Microsoft currently dominates operating systems and word processing and also the way in which workbooks currently drive instruction, teacher proofing the classroom against innovation. We believe this development is not inevitable, but is likely unless practitioners remain committed to local, creative, learner-oriented uses of the available tools.

In summary, many different approaches to the instructional use of technology are being taken, but it is not yet clear which offer meaningful advantages in terms of effective learning, or indeed how computers affect learning (Rosen 2000). Given this, instructors might do well to incorporate technology sparingly and consider it as a complement to personal instruction rather than a replacement.

Another important use of technology in the field is as a source of and resource for practitioner professional development. Adult literacy practitioners have often stated that they feel isolated from other practitioners and from events or resources at the national level (Wagner and Venezky 1999). In an attempt to address this issue, the National Institute for Literacy developed the Literacy Information and Communications System, a web-based resource claiming over 3 million users per month (LINCS 2003). The resources provided by LINCS are aimed at learners as well as practitioners at all levels. Although the direct impact of systems like LINCS is hard to assess, there can be little doubt that it is a remarkably rich collection of ideas, materials, and research for all involved in adult literacy.

One surprising aspect of the increasing access to technological resources has been the impact of the simplest mechanisms. Listservs, where members post to a single e-mail address and have their messages forwarded to all other members, have been remarkably effective. An example is cited by Quigley (2001) who describes the impact of a single NIFL listserv on the discussion surrounding the Workforce

Investment Act. He points out that over 800 messages related to the WIA were posted and that the discussion attracted 18 messages from the Director of the Office of Vocational and Adult Education at the U.S. Department of Education. Although access and influence are far from the same thing, this is a remarkable example of dialogue between practitioners and policymakers.

However, the opportunities open to practitioners are limited in two ways. One is access to the computer hardware, which our experience suggests is becoming a less common difficulty even in remote areas. Both federal and state governments have recognized the value of good Internet connections in schools and libraries, providing one venue for adult educators to gain access to e-mail and the Web (Rosen 2000). The other is practitioners' knowledge of and comfort with the technology itself: "Initial and ongoing training and technical support are necessary, but they are usually the exception rather than the rule in adult literacy practice" (Rosen 2000, p. 311). There have been many different approaches to increasing the professional development impact of technology:

> NCAL and PBS, for example, have offered several national adult literacy training teleconferences. The Massachusetts Corporation for Educational Telecommunications, with the Massachusetts System for Adult Basic Education Support, has offered regular interactive broadcasts across the state for staff development, many of which were also interactive instruction supplements for students. (Rosen 2000, p. 312)

In summary, technology has had, and continues to have, a profound effect on the working conditions of practitioners even though instructional uses are, as yet, not fully developed.

Conclusion

Conclusion

Rereading Fingeret's 1992 document in 2003 has been illuminating. What stands out for us is the number of questions she raised that remain unanswered and the fact that only some of the structural changes she anticipated as a result of implementing the 1991 NLA had the intended effect. For example, her call for a focus on program improvement has not been manifested as ongoing reflection on, and assignment of value to, teachers' experience and knowledge. Instead, there has been increasing emphasis on standardized tests and related materials. This tendency toward unintended—and perhaps undesired—consequences underpins much of our perspective on the last 10 years. In this short section we synthesize our preceding discussion and attempt to identify some implications for the field in the future.

It seems clear to us that there are many questions for which there never will be final answers. One of the biggest challenges for the field will be to continue doing the best job possible while working with considerable uncertainty. Not only are there insufficient resources to deal with all the gaps in our knowledge, it may not be possible to address them through research (Belzer and St. Clair, under review). Uncertainty, as ever, remains a dominant feature of work in adult literacy education. Living with uncertainty can feel "risky"; it requires a certain level of comfort with the unknown. However, we perceive an increased aversion to risk in the field. Perhaps due to tighter accountability structures that have resulted in some programs losing funding (or feeling threatened with that possibility), the field seems to be extremely interested in finding "best practices" as a way to guarantee that programs will produce specific results.

A reasonable response to risk aversion is the tendency to standardization; this is a tendency that we find deeply worrying. We assert the need for diversity and innovation to be recognized and valued within the field among practitioners, funders, and policymakers. Honoring and responding to diversity in goals, learning styles, intelligences, life experiences, and many other domains is a critical dimension of literacy work, and one that should not be obscured or lost by the current drive to systematization. Much of the most interesting theoretical and practical work in adult basic education looks closely at the question "What is different here?" Moves toward institutionalization and standardization begin with the question "What is the same here?"

In essence, we believe the central tension of adult literacy education at the current time lies between institutionalization, standardization, and systematization on one hand—a contraction of practice, and the diversity of practice and of learners on the other—an expansion of the possibilities for doing the necessary work. We examine the implications of this tension by situating it within the purposes and practices of adult literacy education.

Purposes

One significant area of change in adult basic education is the ever-increasing emphasis on employment as its primary purpose. When literacy advocacy groups argue for increased (or more often level) funding to policymakers and others who have interests in adult literacy, the arguments tend to be based in economics. It is extremely common to hear experts on television talking about the "costs of illiteracy" as if it were easy to calculate each person's impact upon the gross domestic product. Such arguments need to be approached with care. It is far from clear that high-wage jobs would be available to everybody who managed to get a GED if adult literacy programs served more people (or the same number more effectively). One of the few initiatives to recognize the full complexity of literacy purposes is EFF, and it is currently far from clear how much influence this project will have at the federal level.

Informal conversations with government officials concerned with work force education suggest that they are open to many different forms of adult literacy education. A recent research project on a union-based basic skills program found that the program administrators

were far more cautious about what was considered acceptable than the government officials expected them to be (St. Clair 2000). There was a communication gap between the funders and the funded where the funded programs assumed that they had to provide skills-based literacy education and the funders assumed that was what the programs wanted to do because they had never been told otherwise. This suggests the importance of stakeholders having better means to communicate the possibilities and limits of their work as a way potentially to create more space for innovation and risk.

Our concern is not that economic advantages are seen to flow from adult basic education, but rather that all too often they are the only benefits valued and sought. Adult literacy education is frequently conceived of as education for the marginalized. We believe that this implies a responsibility to acknowledge the multiple challenges, concerns, and interests of the learners and reflect these in program offerings. Certainly, many learners will identify economic imperatives among their goals, but social inclusion, participation in family life, personal development, and the ability to navigate government structures are also important. The purpose of adult literacy education is not, finally, reducible to a set of observable skills, but necessarily includes affective and social components. It is our hope that a richer purpose for adult basic education will emerge over the next few years as the insufficiency of narrow definitions becomes clearer. For it to flourish requires all interested in this form of education to be ready to recognize and support a broad range of purposes.

Practice

The tension between diversity and innovation on the one hand and universalizing systems on the other emerges clearly within practice as well. One of the most striking examples of the way institutionalization can limit practice is the attempt to standardize conceptions of literacy education between children and adults. Although it would be unwise to claim that reading, writing, and numeracy instruction are completely different after some arbitrary age, the context of adult learning is quite different from that of children. If constructivist and sociocultural perspectives are taken at all seriously, there is a clear implication that assumptions about the parallelism of youth and adult literacy learning must be made with great caution. There are clearly many things adult literacy instructors can—and probably should—learn from K-12 education, but for adult educators to adopt a facile presumption that learners of any age are similar is to deny the complexity of the work of teaching children as well as adults.

The idea that teaching children and adults to read is basically the same is promoted by credentialing systems that accept a K-12 teaching certificate as both necessary and sufficient to instruct adults. We do not see this development as helpful. K-12 teachers are highly skilled, but their skills are different from those prized within adult education. We believe a good adult educator takes on the role of "first among equals" (Houle 1960), quite different from the typical conceptualization of a good educator of children. Engaging adults' life experiences within the educational process is not a useful addition to the educational process, it should be the heart of that process.

The need for varied instructional techniques is worth reemphasizing. Rather than identify the best ways of doing things, research frustratingly appears to suggest consistently that different ways of teaching work at different times in different ways with different people. Whether this assertion is rationalized through multiple intelligence theory, learning styles, or cultural diversity is less important than ensuring that multiple approaches to instruction are present within the classroom and that varied approaches are encouraged and valued across programs and teachers. The central tenet here is a deceptively simple one—instructors need to help learners find out what works best for them—as individuals or within groups. This is harder to do than to recommend with the prevalence of large class sizes, mixed-level

groups, and open-entry/open-exit policies, as well as pressures to "do well on the test" increase. Yet we believe that in the final analysis more is learned—and learned more effectively—by adults when they play an active role in shaping content and method. This does not imply that instructors have nothing to offer and should blindly follow learners (Brookfield 1985). Rather, part of the skill and art of teaching is knowing how to offer expertise at the same time inviting learners to draw on their knowledge and experience in a true collaboration.

Changing the World

We conclude by reflecting on the aspect of literacy that got us interested in the field many years ago—the potential of literacy education to support social change. It should be apparent from what we have written in this section, and indeed the rest of this update, that we see many aspects of institutionalization as a threat to innovative, participatory literacy education. We also recognize that without institutionalization there may be no literacy education at all, that it can create strength and stability, and indeed improve practice and learner outcomes. In many ways the field is stronger than ever, in part due to the field becoming more institutionalized. Yet, we hope this document has raised questions and created caution about the potential costs of institutionalization.

Finally, though, we are not pessimistic. The field is filled with creative, insightful, and resourceful individuals. This rich resource of people gives us a way to preserve and advocate for that which makes literacy education a powerful tool for social change, individual development, and economic self-sufficiency, as long as we continue to find value in all of these purposes. Professionalization of the field is a significant threat to this hope—people who view adult basic education as a paid profession rather than a critical vocation (Collins 1991) are less likely to be willing to rock the boat and ask the hard questions we must keep returning to: What is literacy for? Why would people want it? What can they do with it? How can they use it to address their marginalization? How can we be most effective without limiting opportunities to learn for the diversity of adults the field serves? How can we as educators of adults ensure that our pedagogy is not merely instrumental, but genuinely, inspiringly, hopeful?

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